DOCUMENT RESUME

ED 442 341 HE 032 915

AUTHOR	Eckel, Peter D.
TITLE	Decision Rules Used in Academic Program Closure: Where the Rubber Meets the Road.
PUB DATE	2000-04-00
NOTE	39p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Cost Effectiveness; *Decision Making; Decision Making Skills; Educational Planning; Evaluative Thinking; Higher Education; Judgment Analysis Technique; Problem Solving; *Program Evaluation; *Program Termination; Research Universities; Retrenchment; Systems Approach
IDENTIFIERS	*Decision Rules

ABSTRACT

This study examines, from an organizational perspective, decision rules guiding program discontinuance, testing the framework of decision rule rationality versus action rationality. A multi-site case study method was used; interviews were conducted with 11-16 individuals at each of four research I or II universities that had discontinued at least two academic programs within the last seven years. In addition to the interview data, other materials such as meeting minutes, institutional reports, speeches, and newspaper accounts were examined. Data analysis identified within-case and cross-case decision rules used. The study found that decision rules identified programs with weak or novice leaders, with low numbers of students and faculty, and which were not central to the "college's" mission. The study also suggests that most of the decision criteria are not used to select programs for closure; instead, programs closed were those that had few supporters and were unable to generate adequate political clout. Program closure also had little to do with external demand for graduates, anticipated enrollments, or internal demand for courses. Findings suggest instead that closure is based on action rationality rather than decision rationality. Appended are lists of programs closed and tables of criteria and decision rules by institution. (Contains 49 references.) (CH)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 442 341

Decision Rules Used in Academic Program Closure: Where the Rubber Meets the Road

Peter D. Eckel, Ph.D.

The author is the Assistant Director of Kellogg Projects on Institutional Transformation at the American Council on Education. His scholarly efforts focus on organizational change, governance, and organizational decision making. He thanks Bob Birnbaum, Adrianna Kezar, and Elaine El-Khawas for comments on this paper and earlier drafts.

Citation:

Eckel, P. (2000, April). Decision rules used in academic program closure: Where the rubber meets the road. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

Contact Information:
Peter Eckel, Ph.D.
American Council on Education
One Dupont Circle, NW
Suite 800
Washington DC 20036

Ph: 202-939-9444
Fax: 202-785-8056
E-mail: Peter_Eckel@ace.nche.edu

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

P. Eckel

HE 032 515

Decision Rules Used in Academic Program Closure:

Where the Rubber Meets the Road in Research Universities

The "economic fundamentals" for many American colleges and universities have changed, creating a new playing field with a different set of fiscal rules (Breneman, 1997; Massey, 1994). States are allocating less money, federal research dollars are drying up, and the tuition paying public is adverse to large tuition increases, all while higher education costs are increasing (Breneman, 1993; O'Keefe, 1987). At the same time, those paying public higher education's bills —taxpayers, state legislatures, and tuition paying students and their families— are demanding high quality and more from their investments, and they are increasing their scrutiny (Harvey & Immerwahr, 1995; Haworth & Conrad, 1998). The demands of the increasingly influential market to do new things and to set different priorities are difficult to meet without the extra cushion of uncommitted resources that was available in the past (Levine, 1997). Many suggest that higher education's programs are too costly and out of date and that institutions cannot continue to offer such expansive ranges of programs.

As intentional strategies more and more institutions are adjusting academic priorities and, in many cases, closing academic programs. Recent high profile closures occurred at the University of Chicago, St. Olaf College, and Auburn University. Program discontinuance is a "necessary adaptive mechanism" (Dougherty, 1979, p. 1) in organizations that are constrained in the range of ways they can increase or reallocate their fiscal resources, such as universities, hospitals and government agencies (Behn, 1988; Hardy, 1987; Pettigrew, Ferlie & McKee, 1992). Thus eliminating select programs helps ensure a healthy organization.

Program discontinuance is a difficult decision to make in higher education because the changes can be emotionally charged (Dill & Sporn, 1995), faculty can lose their jobs and have their life's work interrupted (American Association of University Professors, 1995), and the cuts have the potential to threaten institutions' core values and alter institutional identities (Dougherty, 1979; Melchiori, 1982). Unlike other types of decisions in higher education, such as a new curriculum or a revised endowment investment plan, program closures send "shock waves through the university community" (Hardy, 1990, p. 317). They create inner turmoil and stress among those involved and effected by the outcomes (Gumport, 1993), and draw the attention (and passions) of administrators, faculty and trustees (Dougherty, 1979; Melchiori, 1982).

Much of what we know about how organizations function and how they change is based upon assumptions of growth, which are not applicable when cutting back or discontinuing programs (Boulding, 1975; Jick & Murray, 1982; Levine, 1978; Melchiori, 1982). Second, most of the experiences, and thus perspectives, of today's administrators and faculty are biased toward growth because the environment in which they came of age was one of expansion (Behn, 1988; Breneman, 1993; Williams, Olswant & Hargett, 1986; Yezer, 1992). In fact, this bias is so strong that one study found that stable institutions (i.e., not growing) were perceived by their members to share many of the same characteristics as institutions in decline (Cameron, Whetten, Kim, & Chaffee, 1987). Managing retrenchment requires a different mindset than managing growth (Zammuto, 1986).

When institutions have to make tough choices, prioritize among departments, and close academic programs, by what criteria do they make this decision? What programmatic characteristics are considered when institutions must decide what programs to keep and what to close? The purpose of this study is to understand the criteria used by institutional leaders to

identify academic programs for termination. The study adopts a dual framework from limited rational choice theory to understand this decision process.

Conceptual Framework: Program Discontinuance and Decision Rules

The most common portrayal of organizational decision making is one of limited rational choice, where decision makers identify alternatives, explore consequences, and make choices based upon a set of decision rules that differentiate consequences (March, 1994; Pennings, 1986; Pfeffer, 1982). Decisions are made in order to take action and to bring about optimal results. This is a logic of consequence (March, 1997). Limited rational choice suggests there is a relationship between information, criteria and decision outcomes and has been shown to be used in retrenchment decisions (Ashar & Shapiro, 1990). The key questions from this framework are: What acceptable actions are possible? What future consequences might follow each alternative? How valuable are the various consequences? What decision rules are used to select among alternatives? (March, 1994).

Limited rationality theory suggests that not all alternatives are considered. "Instead of calculating the best possible action, they search for an action that is 'good enough.'" (March, 1994, p. 8-9). In other words, decision makers look for options that satisfy some minimum threshold of acceptability (Simon, 1986), thus "intendedly rational behavior is behavior within constraints" (March, 1988, p. 270). These constraints, such as the difficulties of anticipating possible outcomes and considering all alternatives and available information, simplify the decision making process (March, 1994; March, & Simon, 1992; Perrow, 1986). The implication for program discontinuance is that all programs are most likely not under consideration. That said, which are the potential targets and how do institutional decision makers differentiate among feasible choices?

The intended (but not always realized) purpose of program discontinuance is to strategically reshape an institution by internally reallocating resources (Levine, 1997; Slaughter, 1995). "Programs should be measured with an eye toward their relative value, so that reallocation can be facilitated" (Dickeson, 1999, p. 18). The "relative values" used to prioritize various programs in times of retrenchment primarily center upon maximizing program quality and containing costs while considering mission centrality (Gumport, 1993; Slaughter, 1993, 1995).

Dickeson (1999) suggests the following ten criteria in his advice to academic leaders: (1) history, development and expectations of the program; (2) external demand for the program; (3) internal demand for the program; (4) quality of program inputs and processes; (5) quality of program outcomes; (6) size, scope, and productivity of the program; (7) revenue and other resources generated by the program; (8) costs and other expenses associated with the program; (9) impact, justification and overall essentiality of the program; and (10) opportunity analysis of the program (p. 54). The decision rules he suggests are economic (demand, revenue and costs), quality, and centrality.

Yet, the decision rules for identifying programs for closure are most likely not straightforward and based upon the decision rules of cost, quality, and centrality (Gumport, 1993). For example, Slaughter (1995) argues retrenchment decisions are made based on patterns of wealth and power and are market dependent. Because of the history, expectations and norms of collegial decision making (Bess, 1988; Birnbaum, 1988), high stakes decisions such as these require commitment from numerous stakeholders, specifically from the faculty (Birnbaum, 1992; Rosovsky, 1990). Broader retrenchment decisions, as well as program termination decisions, can become extremely political (Hardy, 1990; Pfeffer & Salancik, 1980) as faculty most likely will

be involved in the decision making process that identifies the departments of their colleagues, and possibly their own units, as targets for closure. Thus, cost, quality, and centrality might make sense as the logical decision rules for identifying programs for closure, but they might not generate the needed faculty commitment necessary to implement the decisions. As Hardy (1990) notes, "it is one thing for central administrators to decide on the principle of selective cutbacks; it is another to actually carry them out." (p. 316).

Within the limited rationality framework, an alternative perspective may help understand the criteria used in identifying programs for closure. Brunsson (1982) suggests that organizations face two problems in decision making: one, to choose the right thing—decision rationality—and, two, to get things done—action rationality. Decisions can be made based upon rational criteria but yield little action, or they can be made "irrationally" but take into consideration cognitions, motivations and commitments that lead to action. In program discontinuance, the decision rationality criteria said to be used to make the choice—such as eliminating the weakest programs or the most costly—might not be the needed (action rationality) criteria if programs are actually to be closed. Frequently high stakes decisions have to give the illusion of doing the right things (Ashar & Shapiro, 1990; March, 1994) by advocating decision rationality.

Research Questions

This study sought to better understand from an organizational perspective, when the rubber meets the road and decisions have to be made about which programs to close and which to support, what decision rules are invoked? To what extent did the decision rules support decision rationality or action rationality?

These questions are grounded in the assumption that actors within organizations have the flexibility make choices to create autonomous and preferred outcomes, a logic of consequence. This differs from many organizational decision making paradigms that suggest decisions are guided by rules, in which outcomes are shaped by a logic of appropriateness (March, 1994). For example, Slaughter's (1993) study of retrenchment adopted a rule-based sociological framework of wealth and power (neo-Marxist). Thus, rather than investigate program discontinuance decisions at the level where actors make choices based upon preferences as done in this study, she looked at decisions based upon patterns of logic appropriateness determined by her chosen framework. To make the distinction between paradigms, March (1997) quotes Duesenbery (1960, p. 233) who said "economics [and by analogy psychology] is all about how people make choices; sociology [and by analogy anthropology and political science] is all about how they don't have any choice to make." This study adopts the former assumption, Slaughter's adopted the latter.

This investigation is a post hoc analysis from a larger study of program discontinuance where the discontinuance process was found to involve three sets of criteria: (1) the stated criteria offered to decide among choices; (2) criteria used to remove programs from a list of potential targets; and (3) criteria used to identify the actual closures.

Method

This study adopted a multi-site case study method to address the research questions because its purpose was to understand a complex process phenomena that could not be quantified or controlled, and so that cross-site comparisons could be made (Herriott & Firestone, 1983; Yin, 1994).

To be eligible for this study an institution (1) must have discontinued at least two academic programs within the last seven years that had not been reinstated, (2) was classified as a Research I or II university, and (3) was accessible. The institutions—the University of Maryland at College Park (UMCP), Oregon State University (OSU); the University of Rochester (UR), and Kent State University (KSU)[1]—were selected from a list of 22 universities generated from searches of The Chronicle of Higher Education, Academe, Trusteeship, and phone calls to three national associations. UMCP and OSU terminated degree programs and dismantled the units offering those programs, and KSU and UR discontinued degrees but kept the units offering those degrees in tact. (A distinction hypothesized to be important in the original study.) The specific programs closed at each institution are listed in Appendix A.

I interviewed between 11 and 16 individuals from each institution including administrative and faculty decision makers, and individuals from the effected units. The interviews, using open-ended questions, focused on the processes through which institutions closed academic programs. The specific interview question driving this inquiry was: On what basis did the institution decide to cut particular programs? Interviews were key data sources because in studying organizational change qualitatively, "researchers are in the perspective business" (Pettigrew, 1995, p. 107). They must seek out and listen to different stories that help create a picture of what occurred, how it occurred, and why. Because this research sought to understand decision rules, the meaning assigned by participants became exceedingly important (Pettigrew, 1995; Weick, 1995). Interviews were tape recorded and later transcribed. Interviews ranged in length from 25 minutes to two-and-one half hours; the average was one hour.

[1] Campus leaders at all four institutions declined offers of institutional anonymity.

In addition to interviews, written materials provided important information (Merriam, 1988). I reviewed meeting minutes, institutional reports, speeches, other relevant campus documents, and on- and off-campus newspaper accounts. The documents were obtained primarily from the informants and through meetings with campus archivists. Of particular importance were reports that outlined criteria or gave justifications for specific decisions.

From the collected data, I drafted case reports that included all of the potentially relevant material collected from the site visit (Yin, 1994). This process included four steps: (1) creating a working outline immediately following the campus visit based on information from the interviews; (2) reading each of the interview transcripts and original documents and noting where items and statements fit into the original outline, expanded the outline, or differed from it; (3) upon re-reading each interview and document, placing text into the outline; and (4) going through a similar process for all of the other collected materials.

Each case report contained all of the pertinent information about the institution's discontinuance process. To identify the various decision rules working at each institution and to look for patterns across cases, I used two three-step data analysis processes, first for within-case analysis and then for cross-case comparison (Miles & Huberman, 1994). First, I identified and pattern coded the elements within each case relating to criteria and decision rules. The codes arose from the data, but consideration was given to criteria mentioned in the literature (such as cost, quality, and centrality). Second, I wrote memos linking similar bits of data across the various information sources (individual interviews and written materials) contained in each case report. Third, I developed a set of propositions outlining the decision rules used in each case. A second similar three-step process was carried out for cross-case analysis.

BEST COPY AVAILABLE

Findings

The findings include three sets of decision rules that help understand the means by which programs were identified for closure: (1) the criteria stated by institutional leaders, (2) the decision rules used to reinstate programs earlier identified for closure, and (3) the decision rules used to close programs.

The Stated Criteria

Three of the four institutions (UMCP, OSU, and UR) identified criteria publicly as part their discontinuance processes. KSU did not develop a formal list of criteria. The three sets of criteria are presented in Table 1. UMCP developed its criteria specifically for the closure process in a document called Criteria for Planning, which was created by the executive committee of the senate at the request of the provost. The criteria were developed in the form of questions to determine the worth of the program. Among these criteria were issues such as mission centrality, program quality, demand, duplication, and cost.

At OSU, campus leaders relied upon a previously developed institutional policy, Guidelines for Program Reduction. This document was created by a committee of deans and approved by the faculty senate as part of an earlier program discontinuance process. Among its criteria were issues expected such as reputation and quality, duplication, and cost. OSU's criteria also included issues such as centrality to the idea of a university, legislative mandate, service to the state, and a program whose elimination would "have a substantial negative impact on education and societal concerns in the state." Final criteria focused on past investments in programs, negative effects on underrepresented populations, and anticipated revenue loss. The stated criteria were framed to justify not closing a program.

The stated criteria at UR, called "global factors," were developed by the administrative leaders and announced when the dean unveiled the closure decisions. These criteria included issues such as quality, costs, centrality to undergraduate education, and investment for distinctiveness. They also included criteria not identified by the other institutions such as linkages among units, and the involvement of graduate students in undergraduate education, and faculty scholarship.

All three institutions included cost, quality and mission centrality in their list of stated criteria. The only other common criteria were program uniqueness or duplication avoidance (UMCP, OSU) and opportunities for program distinction (UMCP, UR).

Insert Table 1 About Here

Two potential and unresolved problems of applying the stated criteria to decision making are important to note. First, none of the three institutions addressed the issue of relative weights among their stated criteria. In its public document explaining the decision making process, the leaders of the UR process wrote, "the importance of these factors must be combined with an overall sense of what is best and most feasible given the limited resources for the College as a whole" (p. 5, Rationale for the Restructuring Plan). The document used by OSU administrators did not indicate relative weights, although it did speak to the matter when it said:

> It also should not be assumed that every stated criterion is of equal weight, or that a program will be "scored" by the algebraic addition of its positive and negative features.... Many of these...criteria are partially or substantially subjective in character, and the balancing of these factors will involve value assumptions and policy choices. These

balances will be finally struck and policy choices made at the campus level only after opportunity to address them has been afforded all interested persons in accordance with established...procedures. (p. 4, Guidelines for Program Redirection)

UMCP also did not address weighting in any of its documents. That institution's first report, Preserving Enhancement, noted that the joint faculty-administration decision making body "was acutely aware that many of its goals and criteria tugged the process of decision in conflicting directions" (p. 8). These statements, found at all three institutions pre-specifying criteria, elude to the possibilities of other decision rules at work and that what is said and what is done might be two different things.

The second curious element is the point at which the criteria were presented to the campus. OSU had criteria previously established that was part of a formal institutional policy. UMCP developed its criteria as an early step in the discontinuance process. At UR, the process unfolded differently, as leaders announced the criteria at the end of the process once the decisions had been made, not at the beginning. The criteria were summarized in the Rationale for Restructuring, a document distributed on November 16, the same day of the announced closures.

Criteria Used to Reinstate Programs

Exploring the criteria campuses used to reinstate programs slated for discontinuance provides more information about the decision rules at work. UMCP originally identified programs that they subsequently either removed from the list of affected units (nuclear engineering, hearing and speech, and library sciences at UMCP), UR reversed one decision (mathematics), and the president at OSU prevented a recommended program closure (range management) from being acted upon.

BEST COPY AVAILABLE

At UMCP, informants identified the following explanation for removing the three programs: (1) the costs to dismantle the campus' nuclear reactor and the input of funds from another institution kept the nuclear engineering program afloat; (2) the potential negative impact on the community prevented the hearing and speech clinic from being closed; and (3) a satisfactory level of projected demand and the on- and off-campus support retained the College of Library and Information Science. At UR, some informants said that mathematics' curricular changes and cost-neutral counter-offer, which aligned the department more closely with the goals of the institution's retrenchment plan, convinced the administration to reverse its decision. The strong political opposition from off-campus also likely expedited this decision, although not admitted readily by senior administrators. At OSU, closing range management would have negatively effected Eastern Oregon University because it was a joint program. Table 2 compares the factors considered to reinstate or remove programs from consideration for closure at the three institutions.

In sum, institutions evoked a combination of the following decision rules to determine which programs to remove from the list of closures: cost, contribution to community, projected demand, negative effect on other institutions, off-campus political pressure, and alignment with institutional goals. Patterns of criteria to reinstate programs across the four institutions included costs and external political pressure at UMCP and UR.

Insert Table 2 About Here

Closure Decision Rules

The final element to explore concerning decision rules are those that were seemingly used to identify programs for discontinuance[2]. The OSU procedure forewarns of the possibility that decisions may be reached for reasons other than the stated criteria. That document said:

> Given the great diversity of academic programs, the stated criteria will not include all considerations which may be applicable to individual programs. It is understood that such additional considerations are not rendered irrelevant by their omission and may be therefore considered (p. 3-4, Guidelines for Program Redirection).

The criteria used at UMCP to identify programs for closure were a combination of stated and unstated criteria. A stated criterion was mission centrality, but the decision rule used focused on college mission not institutional mission as some of the programs closed were professional programs in non-professional colleges. At the same time none of the programs slated for termination were critical or core programs (central to the institution's mission) that informants believed the university must have, such as English or chemistry. For example, urban studies and radio, television and film (professional programs) were in the College of Arts and Humanities. One faculty member from a closed program said:

> We were in a college—Arts and Humanities—which was obviously the cornerstone of a university like ours, but we were a professional program. We were conditional; we weren't English; we weren't history; we weren't art. Parenthetically, the other program that got closed [in the college] was another professional program.

The alternative decision rules suggest that the closed programs at UMCP were politically vulnerable. The units that were closed did not have champions among institutional leaders; they

[2] Because the study was retrospective, the researcher was not present during the discussion, thus the following is inferred from the data collected.

were programs where no one would (or did) come to their aid; and they lacked strong leaders. Some of the units had new or novice leaders. The chair of a closed program said, "I was new to the job so I thought it was an exercise. I didn't think they would really implement something as drastic as they were suggesting." Other programs were in political shambles with significant and long-term infighting. One faculty leader described one program as "so badly divided that they couldn't even speak to each other." A dean illustrated the lack of internal consistency and lack of unit leadership when he said:

> In many cases, the programs shot themselves in the foot.... There was a program that demanded an external review and I allowed it to pick the external reviewers. The reviewers came in and said the program you have sucks and what you ought to do is reconfigure it in a different direction, bring in all new people, which is the equivalent of saying shut it down. Now it is very difficult for a faculty to argue on an evaluation that they demanded, with people they chose. That was one of the programs that was closed. It was a very small program.

The criteria used at OSU were similar in many aspects to those invoked at UMCP, and they did follow some of their stated criteria. For example, one stated criterion was a negative impact on education in the state, which prevented range management from being closed. Unstated criteria also were used, many of these related to what one informant described as a "window of opportunity." Among the unstated decision rules was the lack of strong unit leadership: two of the programs had new chairs, and the College of Education faculty had recently voted "no confidence" in the dean. Other decision rules were low numbers of students and faculty. Another was college mission centrality. For example Journalism, a professional program in the College of Liberal Arts, was closed. A faculty member from that college said:

> Journalism became kind of a perennial target within the College of Liberal Arts primarily because it was a professional area within a liberal arts academic unit. In a sense, it was a fish out of water. It was seen as too professional or quasi-commercial. If something had to be cut, then it probably ought to be that to maintain the purity of the unit.

The College of Education also provided a large "window of opportunity" for closure because the college was in the midst of a transition to a fifth-year professional model that effectively restructured teacher education and lowered its student credit hour generation and demand for full-time faculty. Thus, the college was intentionally reducing its faculty size, enrollment, and course offerings.

The decision rules used at UR were similar to those at OSU and UMCP. Among the alternative criterion invoked was the units' lack of strong leadership. Many of the department heads were new or the departments were lead by people who could not resolve internal squabbles. A novice chair of a discontinued program said: "even before I was chair and in my first year as chair, the handwriting in some ways was on the wall for this department. I didn't read it that way immediately, I mean there were a lot of new things for me to read at that point." Many units also had low numbers of faculty and/or numerous faculty vacancies. They also had low numbers of students and tended to be isolated from other programs.

The reinstatement of the mathematics' doctoral program at UR is an informative negative case example where the decision failed because leaders did not adhere to workable decision rules. Mathematics had (1) large numbers of faculty, (2) strong leaders who were able to mobilize their faculty and off-campus supporters; and (3) faculty and the program graduates who were well-connected to the national scientific community and able to create unwanted negative attention. Because UR decision makers violated decision making action rationality, they failed

to close the department. On paper, the criteria to identify mathematics for closure might have been well-founded, but in action, it was fallible.

Although KSU did not identify criteria publicly for program closure prior to its process, a set of decision rules was invoked for determining that one program, counseling psychology, would be closed over another, school psychology. This decision was based upon the following criteria: First, college administrators elected to retain the program more closely aligned with the college's child-focused mission—counseling psychology worked with adults, while school psychology worked with children. Second, counseling psychology had a lower number of faculty (one) who did not or could not garner support for his cause. Third, a program similar to counseling psychology existed that could house the remaining faculty member, and a near-by institution offered a counseling psychology program. The Theater doctoral program at KSU followed a similar pattern. The. program had a low number of students and faculty, it was a scholarly program in a professional school, and thus not central to the college's mission, and it did not have administrative champions.

In sum, the common criteria across the four institutions included lack of strong leadership (UMCP, OSU, UR); centrality to the mission of the college (not institutional mission) (UMCP, OSU, KSU); low numbers of faculty (OSU, UR and KSU); and low numbers of students (OSU; UR; KSU). Table 3 presents the decision rules used across the four institutions.

Insert Table 3 About Here

A footnote on quality. Although quality, a frequently articulated decision rule did not surface directly, evidence suggests that it was invoked as a filtering mechanism. For example,

informants at both UMCP and UR said that although the institution used a process to identify programs for closure, the possible targets were known prior to starting the process. One informant from UMCP said,

> If you were to do a poll on campus: Name the 10 likely departments that you think will be hit. I would bet that the seven that were closed would have appeared on 80% of the lists of people who named them at all. ...And I think that is because anyone who sits in their college knows who the strong units are and who the weak units are and that wasn't a big deal.

Leaders at UR also implied that they knew which programs would most likely be targeted before the process began. The dean said:

> We pretty much knew a group of lets say 10 departments within which we were likely to make some cuts....You don't have to be dean for more than a few years to...have a pretty good sense of the quality.

So quality, although not invoked formally or, for that matter, neither defined nor clarified, most likely played some role in identifying potential programs for closure. A point of limited rationality theory is that decision makers do not consider all alternatives, but start with a constrained list (March, 1994), and quality helped narrow the possibilities although informally. As one informant said, those involved "knew where the water leaked."

Discussion

The purpose of this study was to understand the decision rules guiding program discontinuance. Secondly, this study sought to test the framework of action rationality and decision rationality.

The experiences of the four institutions suggest that the decision rules followed to close academic programs included the following: (1) Programs that were closed had weak or novice leaders. (2) They were small programs with low numbers of students and (3) with low numbers of faculty. (4) Programs were additionally closed that were not central to the mission of the college that housed them (independent of the institutional mission). For example, closed programs were either professional programs in liberal arts colleges, such as journalism at OSU, and radio, television and film at UMCP), or liberal arts programs in professional colleges (such as theater at KSU). The second set of decision rules at work that influenced program closure processes were those that determined which programs to reinstate that once had been marked for termination. They included: (1) costs: being too expensive to close (dismantling the nuclear reactor at UMCP) or finding "cost-neutral" alternatives at UR; and (2) political pressure not to remove programs at UR and UMCP. It is interesting to note that off-campus groups rather than providing the impetus to change as so often presumed, in this study prevented change from occurring.

Second, institutional decision makers did not use the criteria they specified as part of the discontinuance process. Although institutions said publicly that closures were to be based upon some combination of institutional mission centrality, quality, cost, contribution, demand, mandate, uniqueness, distinction, revenue, and investment (to name most of the criteria identified by three of the institutions), they used only quality, and this was used indirectly as an initial filter. The programs closed did have low numbers of students, but rather than being tied to demand, an economic variable, it was tied politically to the small number of pro-program supporters who could not generate adequate political clout. The negative case example, being

the failed attempt to discontinue mathematics at Rochester, which had low numbers of students and faculty yet significant political strength.

Third, this study does little to support much of the common wisdom of deciding among programs to close. Program closure decision rules have little to do with external demand for graduates, anticipated enrollments, or internal demand for courses. Institutional actors do not distinguish among programs directly based on quality of inputs or outcomes, on the revenue or resources generated, on the impact of programs, or on their history (Dickeson, 1999). Rather, as one informant said, "they took the ones they could get away with." Programs were closed in this study that did not have strong unit leaders, that lacked champions on campus, that were not central to the missions of their colleges, and that had small numbers of faculty and students (and thus alumni).

To focus particularly on quality. This often-identified criterion was used to limit the range of choices not chose among potential targets. It was used first, informally, imprecisely, and independently. It set the limits of limited rationality by constraining the number of alternatives considered and the amount and accuracy of the needed information (March, 1997). Quality thus played a role in setting parameters, but it does not factor into the choice process at times or in ways typically expected, such as as a comparative indicator coupled with other criteria such as cost and demand.

Finally, the findings suggest action rationality over decision rationality. Institutional decision makers, as this study demonstrates, invoke a rationality that can get the job accomplished. They do not identify criteria, typically cost, centrality and quality, determine relative weights among the criteria, collect data for comparison, and make decisions based upon the data to maximize economic benefits (Dickeson, 1999). A downside is that action rationality

may not close the most costly programs, the weakest ones, or those least central to the institution leading to a watering down of results. For program closure, action rationality is political. The decision rules invoked identified programs that did not have the political strength to fight back, were small, had weak or novice leaders, and didn't have champions across campus. Decision makers to close programs followed a rationality based upon power, negotiation, and coalition building (Baldridge, 1971; Bolman & Deal, 1992). When the action rules were violated, such as with mathematics at UR, closures did not occur. Even though action rationality brought about closures, three of the four institutions developed a list of criteria that alluded to decision rationality. One might conclude that the illusion of decision rationality is needed to keep the process moving, but action rationality is needed to accomplish the task.

Conclusion

This study suggests the majority of decision criteria identified are not used to select programs for closure. Rather institutional decision makers use alternative criteria, ones that lead to action. Simply having stated criteria, and possibly a process to develop those criteria, may be more important to the discontinuance process than serving a utilitarian choice purpose. Stated criteria most likely fulfill a symbolic role needed for action (Birnbaum, 1988; Bolman & Deal, 1992; Chaffee, 1983). The stated criteria, as well as the legitimate process by which they are developed, create involvement opportunities for key actors, capture the attention of influential stakeholders, develop an atmosphere of seriousness, and identifies members of potential coalitions, both allies and opposition.

Because decisions are not based on cost, centrality, or quality, decision makers might reconsider readily adopting a strategy of program closure in the first place. By closing the programs "they could get away with," decision makers neither meet their goals nor follow

BEST COPY AVAILABLE

efficient processes, and they cause pain, disruption, and hard feelings for little actual return. As this study demonstrates, decisions are not made based on criteria that align themselves with intended outcomes, such as costs, demand, centrality, and duplication. Institutional leaders, to accomplish their task, followed an action rationality that used decision rules such as poor unit leadership, a lack of champion for the program, and small numbers of faculty and students. Decision makers thus are caught between reaching their intended goals—which in the case of program discontinuance tend to be reducing costs, enhancing quality or realigning institutional strategy—and closing politically vulnerable programs that may do little to increase quality, save money, or create new strategy.

Thus, program closures might only be considered as a worthwhile strategy if closing something is more important than closing the right thing—which might be the case to prove agility to state legislators, or to create campus climate of enhancement which is to be taken seriously, such as at UMCP and UR—and if the actual amount of money saved or quality gained is unimportant. At a minimum, institutional leaders should realize that program discontinuance is not a strategy that will maximize outcomes in terms of cost, quality, or institutional centrality.

Finally, leaders should develop a more critical eye to distinguish between helpful and unhelpful management advice. Academic decision makers should come to realize that rational decision rules may be insufficient to bring about action and that advice solely from this perspective may lead to failed processes and perceptions of administrative ineptness.

References

American Association of University Professors, (1995). Policy Documents and Reports (8th ed.). Washington DC: American Association of University Professors.

Ashar, H., & Shapiro, J. Z. (1990). Are retrenchment decisions rational? Journal of Higher Education, 61, 121-141.

Baldridge, J. V. (1971). Power and conflict in the university: Research in the sociology of complex organizations. New York: John Wiley & Sons

Behn, R. D. (1988). The fundamentals of cutback management. In K. S. Cameron, R. I. Sutton, & D. A. Whetten (Eds.), Readings in organizational decline: Frameworks, research and prescriptions (pp. 347-356). Cambridge, MA: Ballinger.

Bess, J. L. (1988). Collegiality and bureaucracy in the modern university: The influence of information and power on decision-making structures. New York: Teachers College Press.

Birnbaum, R. (1988). How colleges work: The cybernetics of academic organization and leadership. San Francisco: Jossey-Bass.

Birnbaum, R. (1992). How academic leadership works: Understanding success and failure in the College Presidency. San Francisco: Jossey-Bass.

Bolman, L. G., & Deal, T. E. (1991). Reframing organizations: Artistry, choice and leadership. San Francisco: Jossey-Bass.

Breneman, D. W. (1993). Higher education: On a collision course with new realities. (AGB Occasional Paper No. 22.) Association of Governing Boards, Washington DC.

Breneman, D. W. (1997). Alternatives to tenure for the next generation of academics. New Pathways: Faculty Careers and Employment for the 21st Century. A Project of the American Association for Higher Education. Washington DC: AAHE.

Brunsson, N. (1982). The irrationality of action and action rationality: Decisions, ideologies and organizational actions. Journal of Management Studies, 19, 29-44.

Cameron, K. S., Whetten, D. A., Kim, M., & Chaffee, E. E. (1987). The aftermath of decline. Review of Higher Education, 10(3), 215-234.

Chaffee, E. E. (1983). The role of rationality in university budgeting. Research in Higher Education, 19, 387-406.

Dickeson, B. (1999). Prioritizing academic programs: A comprehensive agenda for colleges and universities. San Francisco: Jossey-Bass.

Dill, D. D., & Sporn, B. (1995). University 2001: What will the university of the Twenty-First Century look like? In D. D. Dill, & B. Sporn (Eds.), Emerging patterns of social demand and university reform: Through a glass darkly. (pp. 212-236). Tarrytown, NY: IAU Press.

Dougherty, E. A. (1979, April). What is the most effective way to handle program discontinuance? Case studies from 10 campuses. Paper presented at the National Conference of the American Association of Higher Education.

Gumport, P. J. (1993). The contested terrain of academic program reduction. Journal of Higher Education, 64(3), 283-311.

Hardy, C. (1987). Using content, context and process to manage university cutbacks. The Canadian Journal of Higher Education, 17(1), 65-82.

Hardy, C. (1990). "Hard" decisions and "tough" choices: The business approach to university decline. Higher Education, 20, 301-321.

Harvey, J. & Immerwahr, J. (1995, Fall). Public perceptions of higher education: On Main Street and in the boardroom. Educational Record, 51-55.

Haworth, J. G., & Conrad, C. F. (1997). Emblems of Quality in Higher Education. Boston: Allyn and Bacon.

Herriott, R. E., & Firestone, W. A. (1983). Multi-site qualitative policy research: Optimizing description and generalizability. Educational Researcher, 12, 14-19.

Jick, T., & Murray, V. V. (1982). The management of hard times: Budget cutbacks in pubic sector organizations. Organizational studies, 3(2), 141-169.

Levine, C. H. (1978). Organizational decline and cutback management. Public Administrative Review, 38, 316-325.

Levine, A. (1997, January 31). Higher education's net status as a mature industry. The Chronicle of Higher Education, A48.

March, J. G. (1988). Bounded rationality, ambiguity and engineering of choice. In J. G. March (Ed.) Decisions and organizations (pp. 266-293). London, Basil Blackwell.

March, J. G. (1994). A primer on decision making: How decisions happen. New York: The Free Press.

March, J. G. (1997). Understanding how decisions happen in organizations. In Z. Shapira (Ed.) Organizational decision making (pp. 9-32). New York: Cambridge University Press.

March, J. G., & Simon, H. A. (1992). Organizations (2nd ed.). London: Blackwell Business.

Massey, W. E. (1994). Can the research university adapt to a changing future? In J. R. Cole, E. G. Barber, & S. R. Graubard (Eds.) The research university in a time of discontent (pp. 191-202). Baltimore, MD: The Johns Hopkins University Press.

Melchiori, G. S. (1982). Planning for program discontinuance: From default to design. (AAHE-ERIC Higher Education Report No. 5.) Washington DC: AAHE.

Merriam S. B. (1988). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis (2nd ed.). Thousand Oaks, CA: Sage Publications.

O'Keefe (1987, November/December). A new look at college costs. Change, 11-34.

Pennings, J. M. (1986). The nature of strategic decision making. In J. M. Pennings (Ed.), Decision making: An organizational behavior approach (2nd ed., pp. 201-243). Markus Wiener.

Perrow, C. (1986). Complex organizations (3rd ed.). New York: Random House.

Pettigrew, A. M. (1995). Longitudinal field research on change: Theory and practice. In G. P. Huber & A. H. Van de Ven (Eds.), Longitudinal field research methods: Studying processes of organizational change (pp. 91-125). Thousand Oaks: Sage Publications.

Pettigrew, A. M., Ferlie, E., & McKee, L. (1992). Shaping strategic change: Making change in large organizations. The case of the National Health Service. Newbury Park: Sage.

Pfeffer, J. (1982). Organizations and organization theory. Boston, MA: Pitman.

Pfeffer, J., & Salancik, G. R. (1980). Organizational decision making as a political process: The case of a university budget. In Katz, D., Kahn, R. L., & Adams, J. S., (Eds.) The Study of Organizations (pp. 397-413). San Francisco: Jossey-Bass.

Rosovsky, H. (1990). The university: An owner's manual. New York: W. W. Norton.

Simon, H A. (1986). Theories of bounded rationality. In C. B. McGuire, R. Radner (Eds.) Decision and organization: A volume in honor of Jacob Marshak. Minneapolis: University of Minnesota Press

Slaughter, S. (1993). Retrenchment in the 1980s: The politics of prestige and gender. Journal of Higher Education, 64, 250-282.

Slaughter, S. (1995). Criteria for restructuring postsecondary education. Journal for Higher Education Management, 10(2), 31-44

Weick. K. E. (1995). Sensemaking in organizations. Thousand Oaks, CA: Sage Publications.

Williams, D., Olswant, S. G., & Hargett, G. (1986). A matter of degree: Faculty morale as a function of involvement in decisions during times of financial distress. Review of Higher Education, 9(3), 287-301.

Yezer, A. M. (1992). Do procedures that succeed in a growing institution fail in a period of decline? Journal of Higher Education Management, 7(2), 15-21.

Yin R. K. (1994). Case study research: Design and methods. Thousand Oaks, CA: Sage.

Zammuto, R. F. (1986). Managing decline in American higher education. In J. C. Smart (Ed.), Higher education: Handbook of theory and research (Vol. 2, pp. 43 - 84). New York: Agathon Press.

Appendix A

Programs Closed By Institution

University of Maryland at College Park

- the Department of Agriculture and Extension Education, thus terminating bachelor, masters and doctoral degrees in Agricultural and Extension Education;
- the Department of Housing and Design, thus terminating a bachelor degree in Housing, Advertising Design and Internal Design;
- the Department of Textiles and Consumer Economics, thus terminating bachelor degrees in Textiles, Apparel Design, Textile Marketing/Fashion Merchandising and Consumer Economics, and master and doctoral degrees in Textiles and Consumer Economics;
- the Department of Industrial, Technological and Occupational Education, thus terminating M.A., M.Ed., Ed.D. and Ph.D. degrees in Industrial, Technological and Occupational Education and six bachelors degrees in Industrial Technology;
- the Department of Radio, Television and Film, thus terminating bachelor, master and doctoral degrees in Radio, Television and Film;
- the Department of Recreation, thus terminating bachelor, master and doctoral degrees in Recreation;
- the Department of Urban Studies and Planning, thus terminating bachelor and master degrees in Urban Studies (but keeping a Master of Community Planning degree and moving it into the School of Architecture);
- the College of Human Ecology (but keeping all its degree programs except those listed above and distributing them among various colleges).

Oregon State University

- Eliminating the College of Education; and within the college, closing the departments of postsecondary and technological education; mathematical, science and computer science education; counselor education and college student services administration; and curriculum and instruction. These closures would eliminate degree programs in industrial arts education, marketing education, reading, social science education, technology education, trade and

BEST COPY AVAILABLE

industrial education, and training and development. The remaining programs would be merged into a reorganized College of Human Ecology and Education;

- Closing the Department of Religious Studies and the Journalism Department, terminating all degrees offered through those units, and eliminating an undergraduate degree program in broadcast media, all in the College of Liberal Arts;
- Closing the Department of General Sciences in the College of Science;
- Eliminating the hotel, restaurant and tourism management program; and closing the Management Science Department in the College of Business;
- Closing undergraduate degree programs in poultry science and soil science, and merging 17 departments into 11 in the College of Agricultural Sciences.

University of Rochester

- Ph.D. programs were "suspended."[3] in Chemical Engineering, Mathematics, Linguistics, and Comparative Literature;
- A year prior, the doctoral program in Anthropology was closed.

Kent State University

- Ph.D. program in Counseling Psychology;
- Ph.D. program in Theater.

[3] Programs were not officially terminated, but rather suspended, a technical term in the State of New York that does not require state permission and leaves open the door for reinstatement.

Table 1

Stated criteria by institution

Stated criteria	UMCP	OSU	UR
Mission centrality	Is the program central in terms of growth, preservation and communication of knowledge, and inst. mission?	A program that is essential for every university.	The centrality of the discipline and its current or projected importance to the undergraduate population.
Quality	What is the quality and reputation of the program and faculty?	An objective evaluation indicates national or international reputation.	The quality of faculty and graduate students.
Cost	What are the costs of maintaining vs. increasing its level vs. savings resulting from reductions?	Cost is minimal relative to the tuition or income it generated.	The costs of supporting the research/scholarly mission of the program.
Contribution to region		OSU is better equipped than other organizations. A substantial	

		negative impact on education and issues in the state.	
Demand	What is the current and projected importance and demand for the program?		
Legislative mandate		A program that exists because of legislative statute.	
Uniqueness/ Duplication	Does the program duplicate work on campus or within the system?	A program that is the only one of its kind within the state.	
Opportunity for distinction	Are there opportunities for comparative advantage because of time, location or faculty talents?		A consideration of which disciplines are distinctive or could be with a modest investment.
Impact on instruction and scholarship			Role of grad. students in the delivery of undergrad. instruction and in the conduct of faculty

		research/scholarship.
Revenue	Elimination would result in substantial loss of revenue.	
Past investment	A program that represents a substantial capital investment.	
Affirmative action/under -represented groups	A program that is staffed by members of groups protected by affirmative action.	
Dependence of programs		Critical linkages that exist (or should exist) between scholarly or instructional programs across departments.

Table 2

A comparison of criteria used to reinstate by institution

Criteria to reinstate	UMCP	OSU	UR
Costs	Too expensive to dismantle nuclear reactor.		Cost-neutral arrangements.
Contribu-tion to community	Hearing and speech clinic.		
Projected demand	Enrollment in LIS.		
Negative effect other institutions		Range Management at Eastern Oregon.	
Political pressure	On- and off-campus supporters for LIS.		Involvement of American Society for Mathematics, Negative Publicity in NY Times and Chronicle of Higher Education.
Alignment with goals			Altered the courses for non-math majors;

	Developed tighter linkages with other units.

Table 3

A comparison of used decision rules by institution

Suspected criteria	UMCP	OSU	UR	KSU
Lack of strong unit leadership	New leaders, vacant leadership positions;	Vote of no confidence in Education; weak leaders	Weak leaders; Novice leaders	
Mission centrality in college, not institution	Professional programs in liberal arts colleges	Professional program in liberal arts college		Adult focus in child-centered unit; Scholarly program in professional college (Theatre)
No champion	No support from top admin. or college admin.	No support from top admin.		
Small number of faculty/ vacant lines		Faculty vacancies; Low numbers of faculty in units	Faculty vacancies; Low numbers of faculty in units	Only one faculty member (Counseling Psychology & Theatre)
Small number of		Low numbers of students	Low number of students	Only 8 students (Theatre)

students			
No linkages with other units		Disconnected department	Disconnected faculty member
Other changes occurring	Moving to a 5th year model in teacher-ed.		
Program duplica-tion			Similar program on campus and near-by